

“Research on the Format” —on the European EHR Exchange Format—

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Abstract. With the European Health Data Space (EHDS) common, usable, and reliable tools for real interoperable services is required to enhance healthcare cooperation for better health towards a European Health Union. The EEHRxF (European Electronic Health Record Exchange Format) is a key building block, coming with a set of advanced interoperability resources to support cross-border mobility, health data exchange in the EHDS primary and secondary use of health data. In this workshop we will engage with the MIE2024 community to identify research opportunities on the EEHRxF and provide evidence on adoption maturing and accelerating a sustainable and scalable digital health innovations ecosystem.

Keywords. EEHRxF, EHDS,

1. Introduction

The EU recovery and resilience activities advance the digital transformation in general and health in particular in an accelerating pace. Passing the European Health Data Space legislation in the spring of 2024 [1] is a key pillar of the future European Health Union and paves the way for a vibrant pan-European (Digital) Health space requiring common, usable, and reliable interoperable services to deliver high quality health data and drive competitiveness and innovation. The EHDS has singled out priority areas for cross-border health data use; ePrescription, eDispensation, Patient Summary, lab and imaging results, imaging studies, and Discharge Summary. With the EHDS legislation and the EEHRxF evolution, deployment and adoption, research and development activities are needed to enhance healthcare cooperation for better health, efficient care provision and effective digital services in the European Union. In fact, there are impetus for new and novel digital solutions that offer access to health data at the point of need, continuity of care incl. cross-border mobility, and let the citizens “collect, curate and control” their personal health data [2].

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There is progress on making advanced interoperability resources for these areas available as part of the EEHRxF. *XpanDH*; expanding Digital Health through a pan-European EHRxF-based Ecosystem [3], *xShare*; Expanding the European EHRxF to share and effectively use health data within the EHDS [4], and *Gravitate-Health: Empowering and Equipping Europeans with health information for Active Personal Health Management and Adherence to Treatment* [5] are examples of European Union co-funded projects fostering research and innovation that rely on and contribute to the European Electronic Health Record Exchange Format (EEHRxF).

At the same time, the transformations call for research on the formation, trust and ethical service provision and digital health literacy to fully benefit and progress the Format and the EHDS. Specific research activities are urgently needed to uphold European health values of safe, FAIR, inclusive and accessible, understandable and ethical services to help navigate in the transforming (digital) health ecosystems where people from all walks of life are called to play an active role. This way, digital health literate patients and persons from all walks of life can engage with health professionals, researchers and policymakers to advance health and wellness, and shape precision medicine and population health initiatives. Since barriers and challenges should not be underestimated, culture, education, skills, costs, perceptions of power and role, are essential for multidisciplinary action.

2. Description of the workshop's topic

In this workshop we will bring forward insights and inspiration from ongoing R&D projects, to stimulate future proof research endeavors, where the EEHRxF opens novel opportunities to progress advanced interoperability standards and employ them in the EHDS for high quality data to drive decisions

The workshop facilitators will discuss research opportunities on 1) transformative power of communities of doers leveraging FAIR health data in the EHDS to equip the most important, but also least digitally supported actors in health care with access to and use of health data for cross-border mobility or everyday health management activities, 2) co-creation, deployment and assessment of targeted health literacy interventions to foster understanding, data integrity of contributions from patients and providers, and stewardships when sharing and complementing health information, 3) health data support and EEHRxF resources that support cross-border ePrescription with safe medication dispensation, substitution that is compatible with ongoing medication and access to information about medicines in a language of choice in addition to language of the justification where product is dispensed. The workshop will provide preliminary indications on whether a dedicated Working Group on EHDS/EEHRxF is needed.

2.1. Organization of the workshop

Total time for the activities in this workshop in 60 minutes. To set the stage, we will present the core ambition of the workshop: “research on the Format” (5 minutes) followed by introductions on the 3 different opportunities (7 minutes each), followed by workshop style discussions to identify 2 research topics each for the introduced topics (20 minutes) and report back with conclusions and next steps (10 minutes).

3. Panelist's short Bio

Anne Moen is full professor at the Faculty of Medicine, University of Oslo, Oslo, Norway, and adjunct professor, Norwegian Center for eHealth Research, Tromsø, Norway. She has extensive experience in user-focused research in health informatics and citizen centered services with emphasis on feasibility and usefulness for vulnerable groups and elderly. She is Coordinator of Gravitare-Health Public-Private partnership.

Catherine Chronaki is the Secretary General of HL7 Europe and interoperability Coordination Lead of Gravitare-Health. She is the Scientific Coordinator of xShare Research and Innovation Action.

Henrique Martins is Professor at Iscte, Lisbon and Faculty of Health Sciences, UBI, Covilhã, Portugal. He was president of SPMS, Portugal's Digital Health Agency for close to 7 years, and former Member States co-chair of the EU eHealth Network. He is the Coordinator of XpanDH CSA to support development and adoption efforts for the European Electronic Health Record Exchange Format.

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